1 **Abstract**

2   The present invention provides improved methods and

3 systems for diagnosis, prevention, and treatment of a bone

4 related condition such as osteoporosis. The present

5 invention integrates bone mass measurement techniques with

6 various preventive and treatment measures to create a

7 protocol for prevention and treatment of the bone related

8 condition. In one embodiment, a medical practitioner

9 treats bone mass degradation occurring in a patient by

10 measuring a bone characteristic level in at least one of

11 the patient's bones to yield a score, conducting a gait

12 analysis to yield a gait characterization, measuring a bone

13 mass marker concentration in at least one of the patient's

14 body fluids to yield a bone marker level, and prescribing

15 one or more therapies. Optionally, the treatment may

16 include designating a future time to repeat the measurement

17 of a bone characteristic level, the gait analysis, and the

18 measurement of bone marker level.

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